

AMPHIBIANS AND REPTILES FROM SOUTHERN PERU COLLECTED BY THE PERUVIAN EXPEDITION OF 1914- 1915 UNDER THE AUSPICES OF YALE UNIVERSITY AND THE NATIONAL GEOGRAPHIC SOCIETY.

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Mr. Edmund Heller, who was engaged as naturalist by the Peruvian Expedition of 1914-1915 under the auspices of Yale University and the National Geographic Society to southern Peru, collected a number of amphibians and reptiles. While Mr. Heller's primary interests were mammals and birds, nevertheless he secured some interesting lower vertebrates. Not a few of these, notably the Teiids, were caught in his cyclone traps set for small rodents. Unless otherwise mentioned all of the specimens considered here were collected by Mr. Heller.

There is considerable diversity of usage in the spelling of some of the place names. For example, Machu Picchu is sometimes and probably correctly spelled Macchu Picchu. In this paper we have followed the spelling used on a map compiled for the expedition by A. H. Bumstead, C. F. Maynard, and others.

It is a pleasure to thank Dr. Hiram Bingham, leader of the expedition, and the authorities of the National Geographic Society and of the United States National Museum for the privilege of studying and reporting upon this collection. By the articles of agreement under which the collections were made they become the property of the United States National Museum. A series of duplicates has, however, been added to the collections of the Museum of Comparative Zoölogy by permission.

Class AMPHIBIA.

1. BUFO MARINUS (Linnaeus).

Three half-grown specimens (U.S.N.M. Nos. 60802-4) from San Miguel bridge over the Urubamba River, near the ruins of Machu Picchu, altitude 6,000 feet, July 2, 1915; another half-grown specimen (U.S.N.M. No. 60750) from the Cosireni River, August, 1915;

one young individual (U.S.N.M. No. 60772) from San Fernando, October 15, 1915; one very young one (U.S.N.M. No. 60752) from Santa Ana, 3,400 feet, October, 1915; and three large adults (U.S.N.M. Nos. 60799-801) from the same locality, but taken in December.

2. *BUFO SPINULOSUS* Wiegmann.

Nineteen adult and young specimens (U.S.N.M. Nos. 60789-98 and 60757-65) from Huarocondo, 11,000 feet altitude, April, 1915; 11 specimens of various ages (U.S.N.M. Nos. 60773-8 and 60805-9) from Chospiyoc, 10,000 feet, July, 1915; 10 adults (U.S.N.M. Nos. 60779-88) from Yuveni on the Cosireni River, 4,000 feet, September 5, 1915.

3. *BUFO INCA* Stejneger.

A single specimen from Idma, 6,000 feet, October, 1915 (U.S.N.M. No. 60771).

Stejneger has kindly compared this specimen with his type and has informed us by letter that the two specimens "agree in all essential points, even to that of the size of the specimens." In the present specimen "the snout is possibly a trifle less protruding, the postorbital crest less definite, though even in the type the crest is not well pronounced. The hind legs * * * are also slightly shorter [than in the type] and the tubercles on the underside of the tarso-metatarsus less developed."

In the original description the notes on the coloration were accidentally omitted. The specimen before us is slightly darker than the type, but Stejneger tells us that the color pattern is much the same.

The coloration in our specimen is as follows: Ground color (in alcohol) a pale fleshy pink or gray; a pale vertebral stripe of the same color; the whole upper surface covered with a zigzag pattern of black and brown; of this pattern the most distinct figure is a dark brown, black-edged cross extending from the eyelids to the mid-dorsal region and cut mesially by the light vertebral line; the posterior extremities of this cross-like figure continue to the inguinal region as a more or less well-defined pair of dark stripes; below these stripes on either side another black line extends from above the tympanum, across the paratoid gland to the inguinal region; a light colored dorso-lateral stripe is present on either side between the dark stripes; hind limbs irregularly but conspicuously cross-barred; ground color of ventral surface a pale yellow; throat and chest rather heavily marbled with dark brown, the marks decreasing in number posteriorly.

Bufo inca is apparently a close ally of *Bufo ockendonii*. To judge from the descriptions, we are inclined to consider them so closely

related that, if distinct at all, they probably represent at most two geographical races of the same species.

4. LEPTODACTYLUS RUBIDO Cope.

One adult (U.S.N.M. No. 60755) from the Comerciato River, 1,800 feet altitude, near the great bend of the Urubamba; another (U.S.N.M. No. 60756) from Idma, near Santa Ana, October, 1915; and two well-developed tadpoles (U.S.N.M. No. 60751), probably referable to this species, from Ñusta Hispaña, June 11, 1915, E. C. Erdis, collector.

The two adults have been compared with the three type specimens¹ and have been found identical with them in physical features. The coloration is much darker, however, in our specimens, but this is probably due to the types being faded and the fresh specimens having been preserved in formalin.

5. GASTROTHECA BOLIVIANA (Steindachner).

One adult female and two half-grown individuals (U.S.N.M. Nos. 60766-8) from Huarocondo, 11,000 feet altitude, April, 1915; two adult males (U.S.N.M. Nos. 60753-4) from Tocopqueya in the Occobamba Valley, July 25; and one adult male (U.S.N.M. No. 60769) from Yuveni in the Cosireni Valley at an altitude of 4,000 feet, September, 1915.

This series agrees very well with another lot (M. C. Z. 2576) from Sucre, Bolivia, but all these specimens differ from the original description of the species in having a slight rudiment of a web and in having only an indistinct glandular fold on each side of the body. *Gastrotheca boliviana* is closely related to *Gastrotheca peruana* (Boulenger). The two species form a group by themselves very distinct from all other described species of *Gastrotheca*. *G. boliviana* differs from *G. peruana* in the following characters:

1. Vomerine teeth in two oval groups between and partly below the choanae (*G. boliviana*), instead of vomerine teeth in two short, straight transverse series between the choanae (*G. peruana*).

2. A glandular fold from the eye along the edges of the body (*G. boliviana*), instead of warts of the back of unequal size, the largest of which are paratoid-like and may be confluent into longitudinal folds (*G. peruana*).

3. Toes without webs (but a rudiment of a web is present in our specimens of *G. boliviana* from Bolivia), instead of toes one-third webbed (*G. peruana*).

4. Tibio-tarsal articulation reaches the hinder edge of the eye, or sometimes to the nostril (*G. boliviana*), instead of tibio-tarsal articulation reaches the tympanum or the eye (*G. peruana*).

G. peruana is probably the northern representative of the *G. boliviana* stock. Our specimens may possibly represent an intermediate form. If so, they are doubtless more closely related to *G. boliviana* than to *G. peruana*.

¹ Acad. Nat. Sci., Philadelphia, Nos. 11392-4.

Eleutherodactylus binghami Stejneger¹ is synonymous with this species. We have examined two paratypes (Mus. Comp. Zool. Nos. 4173-4) of *E. binghami* and have come to the conclusion that they represent the young of *G. boliviana*. The foot of this species of *Gastrotheca* has a very short web, but the terminal phalanges are nevertheless claw-shaped.

Class REPTILIA.

Suborder SAURIA.

6. STENOCERCUS TORQUATUS Boulenger.

One adult specimen from Santa Ana (U.S.N.M. No. 60725); three adults (U.S.N.M. Nos. 60731-3) from the Cosireni River, 4,000 feet altitude; six adults and one young (U.S.N.M. Nos. 60710-13 and 60736-8) from San Fernando, 4,500 feet, October, 1915.

The specimen from Santa Ana agrees well with Boulenger's description of the squamation, but differs in coloration and shows only a trace of the ante-humeral band. The three specimens from the Cosireni River, however, have this marking better developed.

7. LIOLAEMUS ANNECTENS Boulenger.

One adult from the Cosireni River, 4,000 feet altitude, September 5, 1915 (U.S.N.M. No. 60709).

A single specimen is apparently referable to this species and not to *L. multiformis* Cope, if the two are really distinct.

8. LEOCEPHALUS ERVINGI (Stejneger).

A single adult from Machu Picchu, October 30, 1915 (U.S.N.M. No. 60742).

Stejneger¹ has described what he called *Stenocercus ervingi* from a single very young example. This specimen was only 84 mm. in total length, and the generic characters were difficult or impossible to discern. We have before us a single adult (U.S.N.M. No. 60742), which we believe to be a *Leiocephalus*, owing to the presence of abdominal ribs and of general *Leiocephalus* squamation. It is beyond doubt the adult of Stejneger's species. His type came from Huadquina, in the Urubamba Valley, only a few miles from Machu Picchu. To supplement Stejneger's description a diagnosis of this adult specimen is added:

Upper head scales of but moderate size, distinctly rugose; nostril supero-lateral; supranasal separated from the nostril by a row of scales; two rows of distinctly enlarged supra-oculars, separated from the supra-orbital zone series

¹ Proc. U. S. Nat. Mus., vol. 45, 1913, p. 542.

and from the supraciliaries by two or sometimes three series of scales; no well-defined parietals, interparietal or occipitals; a very feebly developed ridge composed of two rows of slightly enlarged serrate scales above the temporal region; four slightly enlarged scales projecting from the anterior border of the ear; sides of neck distinctly folded, covered with rather small strongly imbricate keeled scales; a rather well-developed continuous nuchal and dorsal crest; dorsal scales of medium size, strongly keeled, the keels forming continuous ridges; scales strongly imbricate and slightly mucronate; laterals smaller, less conspicuously keeled; ventrals slightly larger than laterals, smooth; about 70 rows around the middle of the body; scales of the throat and chest smooth; the hind limb being carried forward along the body reaches about the angle of the jaws; tail slightly compressed, with a serrated upper edge most conspicuous at the base. Color olive brown above, with an irregular white line extending along each side from the tympanum to the sacral region; a light line composed of scattered white spots extending from the nose, below the eye, and across the temporal region; a row of white dots on each side of the lower jaw; belly coppery green, with a dark brown spot on each side of the chest extending up over the scapular area, where it is bordered posteriorly with whitish, and a long, more or less rectangular dark brown nearly black spot on the middle and posterior belly area.

Total length, 228 mm.; length of head, 21 mm.; width of head, 17.5 mm.; tip of snout to vent, 84 mm.; fore limb, 35 mm.; hind limb, 62 mm.; tail, 144 mm.

9. *LEIOCEPHALUS ARENARIUS* (Tschudi).

Four adult specimens from Chospiyoc, Huarocondo River, April 20, 1915 (U.S.N.M. Nos. 60705-8), and one (U.S.N.M. No. 60811) from Toranton, May 1, 1915; also one half-grown specimen (U.S. N.M. No. 60810) from Ollantaytambo, 9,400 feet altitude, May 15, 1915, O. F. Cooke, collector.

Roux¹ has pointed out that *L. rhodogaster* Boulenger² is evidently identical with this species. *L. lineigularis* Werner³ is apparently another synonym. The type localities of *L. rhodogaster* and *L. lineigularis* are very near together, and the descriptions of these species are very similar.

10. *TUPINAMBIS NIGROPUNCTATUS* Spix.

Two fine adults and one half-grown specimen (U.S.N.M. Nos. 60678-80) from the Comerciato River, 1,800 feet elevation, near the great bend of the Urubamba, September, 1915.

11. *KENTROPYX CALCARATUS* Spix.

One mutilated specimen (U.S.N.M. No. 60744) from the same locality as the specimens of *Tupinambis* and taken about the same time.

¹ Rev. Sulsse Zool., vol. 15, No. 2, 1907, p. 300.

² Ann. Mag. Nat. Hist., ser. 7, vol. 7, 1901, p. 546.

³ Abh. Mus. Dresden, vol. 9, 1901, p. 3.

This specimen may possibly be referable to *K. pelviceps* Cope, but the head and throat are so badly damaged that it is impossible to determine.

12. *AMEIVA AMEIVA PETERSII* (Cope).

Eight specimens mostly adults (U.S.N.M. Nos. 60685-91) from Santa Ana, 3,400 feet altitude.

These specimens are typical of this race as recently defined.¹ The occurrence of these specimens in the Urubamba Valley considerably extends the lizard's range.

13. *PRIONODACTYLUS SPINALIS* Boulenger.

Two specimens (U.S.N.M. Nos. 60729-30) from Ollantaytambo, July 14, 1915; one (U.S.N.M. No. 60745) from the Cosireni River, August, 1915; and 15 (U.S.N.M. Nos. 60663-77) from Tocopqueyu in the Occobamba River Valley, July 25, 1915.

Two paratypes² of this species are before us. They fall well within the range of variation of scutation exhibited in this series of 18 specimens collected by the expedition. The smaller of the paratypes is, however, somewhat different from any of these specimens. In addition to the vertebral stripe, there is a dorso-lateral stripe of light gray on each side of the back. In all but one of our specimens the vertebral stripe is faintly indicated and the other two stripes are entirely wanting. This difference of coloration may be a constant feature, and our specimens may represent a distinct geographical race of *Prionodactylus spinalis* in southern Peru. But in view of the absence of any definite anatomical character, we do not feel justified in describing it.

The type locality of *Prionodactylus spinalis* is given in the original description as Huancabamba, Peru. Doctor Boulenger has informed us by letter that this was probably an error and that the specimens may have come from Oxapampa. If they came from Huancabamba, it was certainly from the Huancabamba of central but not that of northern Peru.

Oxapampa (also spelled Oxabamba) is on the Rio Huancabamba, a small tributary of the Rio Palcazu, about 40 miles east-northeast of Cerro de Pasco. There are two towns named Huancabamba in Peru—one a little village on the Rio Huancabamba, mentioned above, and the other a town in the Department of Piura.

14. *OREOSAURUS ANOMALUS*, new species.

Diagnostic characters.—Habit and coloration similar to *Oreosaurus ocellifer* Boulenger; scutation somewhat the same, but differing in the following striking features: A pair of supranasals separat-

¹ Barbour and Noble, Bull. Mus. Comp. Zool., vol. 59, No. 6, 1915, p. 466.

² Mus. Comp. Zool., No. 8082, and Amer. Mus. Nat. Hist., No. 5280.

ing the nasals and broadly in contact; 32 scales from the occiput to the base of the tail; 36 scales around the middle of the back, including ventrals; ventrals squarish in 10 longitudinal and 17 transverse rows.

Range.—Valley of the San Miguel River, southern Peru.

Type-specimen.—Cat. No. 60704, U.S.N.M., San Fernando, 4,500 feet, Rio San Miguel, southern Peru; October, 1915; E. Heller, collector.

Description of type specimen.—Adult male: Head short, body and limbs moderate; a pair of supranasals separating the nasals and broadly in contact; frontonasal pentagonal longer than broad; frontal pentagonal, the point directed backward being very obtuse; interparietal slightly longer than parietals, about once and a half as long as frontoparietals, distinctly longer than the frontal; three occipitals, the lateral ones as large as the largest supraoculars, the median one about one-fifth as large as either; three supraoculars; a row of supraciliaries increasing in size anteriorly, the most anterior very large and simulating a fourth supraocular; no loreal; a single row of infraorbitals; temporals large; 8 upper and 7 lower labials; 1 anterior unpaired chin shield followed by 3 pairs in contact; 8 transverse rows of scales and 1 row of granules between chin shields and posterior edge of the collar, the granules between the first and second rows of scales; 12 scales in the collar; dorsal scales elongate, keeled, more than twice as long as broad; lateral scales decreasing rapidly in size from above; a row of smaller scales, interpolated between each of the lateral rows; 32 scale rows from the occiput to the base of the tail; 36 scale rows around the middle of the body, ventrals included; ventrals rectangular, nearly square, in 10 longitudinal and 17 transverse rows; 6 preanal scales, 3 posterior ones preceded by a pair of which 1 scale is divided transversely to make the sixth scale; 7 femoral pores on one side, 8 on the other; tail about once and a half as long as the body, the scales like those of the body. Color (in alcohol) above dark ashy brown, tinged with reddish brown on the head and back, a yellow stripe indistinctly bordered with dark brown running from the eye across the temporal region and fading out on the neck, a few black specks on the head and back; a series of 8 black ocelli with small white centers on one side of the body, 12 on the other; ventral surface uniform yellowish white, a few black specks on the labials, chin-shields, and outer edge of the ventral surface.

Total length, 119 mm.; tip of snout to vent, 39 mm.; vent to tip of tail, 80 mm.; tip of snout to ear, 8 mm.; width of head, 5 mm.; fore leg, 8.5 mm.; hind leg, 13 mm.

Remarks.—This species is represented in the collection by the type only. The most striking peculiarity of the species is the pair of

supranasals, which do not occur in any other species of *Oreosaurus* nor in the closely related genus *Proctoporus*. These scales are very regular in outline. The surrounding scales are in perfectly normal position, which condition leads us to believe that these scales are perfectly normal.

15. *OREOSAURUS LACERTUS* Stejneger.

Two specimens (U.S.N.M. Nos. 60699-700) collected by Erdis at Ñusta Hispania, June 11, 1915; two (U.S.N.M. Nos. 60719-20) by O. F. Cook at Ollantaytambo, May 15, 1915; one (U.S.N.M. No. 60746) from the same locality, July 14, 1915, and two (U.S.N.M. Nos. 60726-7) from Torontay, May 10, 1915, by Heller.

16. *PROCTOPORUS OBESUS*, new species.

Diagnostic characters.—A loreal widely separated from the supralabials by the freno-orbital and nasal which are in broad contact; one anterior unpaired chin shield followed by three pairs in contact; dorsal scales elongate, smooth, in 24 transverse rows; ventral scales in 12 longitudinal rows.

Range.—Region of Ñusta Hispania, southern Peru.

Type specimen.—Cat. No. 60748 U.S.N.M.; Ñusta Hispania, southern Peru, June 11, 1915; E. C. Erdis, collector.

Description of type specimen.—Adult male: Head short, body stout, limbs moderate; frontonasal much longer than broad, slightly longer than the frontal; frontal hexagonal; interparietal distinctly longer than parietals, slightly narrower, once and a half as long as frontal; three occipitals, the lateral ones much larger than the largest supraocular; the median one about one-fifth as large as either; three supraciliaries, the anterior one as large as the anterior supraocular; a loreal widely separated from the supralabials by the freno-orbital and nasal which are in broad contact; a single row of large infraorbitals; temporals large; eight upper and six lower labials; one anterior unpaired chin shield followed by three pairs in contact; 10 transverse rows of scales between chin-shields and collar, including the latter; nine collar scales; dorsal scales elongate, quadrangular, smooth, juxtaposed; in the middle of the body just twice as long as broad; scales on the upper part of the sides equal in size to the dorsals; these scales gradually and only slightly decreasing in size on the lower flanks; a series of very small scales interpolated between each of the lateral rows from the point where they join the ventrals for a short distance upward, these small scales sometimes hidden in a longitudinal fold; about 44 scales from occiput to base of the tail, 36 around the middle of the body, including the ventrals; ventral plates quadrangular, nearly square, in 12 longitudinal and 21 transverse series; two anterior preanals followed by four smaller mar-

ginal ones; four femoral pores on each side; tail stout, the scales similar to those of the body. Color (in alcohol) above uniform pinkish brown, the outer edges of the scales lighter than the inner edges; dorsal color fading out on the sides; ventral surface uniform dull cream color.

Total length, 152 mm.; tip of snout to vent, 78 mm.; vent to tip of tail (regenerated), 74 mm.; tip of snout to ear, 18 mm.; width of head, 13 mm.; fore leg, 15.5 mm.; hind leg, 23 mm.

Remarks.—The type is the only representative of the species in the collection. It was evidently caught in a mouse trap, for it is badly damaged, still the scutation is not seriously injured. There can be no doubt as to the distinctness of the species.

Suborder SERPENTES.

17. BOA HORTULANA Linnaeus.

One young (U.S.N.M. No. 60694) from Rio Cosireni, 3,000 feet altitude, and one adult (U.S.N.M. No. 60693, skin only) from Rio Comerciato, 2,000 feet altitude.

18. DRYMOBIUS BODDAERTI (Santzen).

One young specimen (U.S.N.M. No. 60716) from San Fernando, Rio Corsireni, October 15, 1915.

19. PHRYNONAX FASCIATUS (Peters).

One fine adult (U.S.N.M. No. 60696) from Paltaybamba, 6,000 feet altitude, August, 1915.

20. SPILOTES PULLATUS (Linnaeus).

Two enormous but badly shot adults (U.S.N.M. Nos. 60661–2) from Santa Ana in the Urubamba Valley, 3,400 feet elevation, December, 1914.

21. DRYMARCHON CORAIS CORAIS (Boie).

One young specimen (U.S.N.M. No. 60749) collected by Erdis, at Santa Ana, 3,900 feet altitude, December, 1914, and one large adult (U.S.N.M. No. 60660) by Heller, October, 1915, same locality, but 500 feet lower.

22. HERPETODRYAS FUSCUS (Linnaeus).

One adult (U.S.N.M. No. 60695) from Paltaybamba, 6,000 feet altitude, August, 1915.

23. ATRACTUS PERUVIANUS (Jan).

One specimen (U.S.N.M. No. 60717) from Pucyura, 9,500 feet altitude, June 15, 1915; E. C. Erdis, collector.

This is the species which Ruthven and Barbour called *A. badius* in 1913.¹ It is apparently not typical of either species, to judge by

¹ Proc. Acad. Nat. Sci., Philadelphia, 1913, p. 505.

figures and descriptions only. At present, until authentic material is available for comparison, it may perhaps better remain under this caption.

24. *LEPTODEIRA ANNULATA* (Linnaeus).

One adult (U.S.N.M. No. 60736) from the San Miguel Bridge, near the ruins of Machu Picchu, in the Urubamba Valley, July 2, 1915.

25. *CLELIA PETOLA SEMIFASCIATA* (Tschudi).

One adult (U.S.N.M. No. 60684) from San Fernando, Cosireni River.

26. *CLELIA CLOELIA* (Daudin).

One specimen (U.S.N.M. No. 60747) from Paltaybamba, 6,000 feet elevation, June 15, 1915; collected by E. C. Erdis.

27. *TACHYMENIS PERUVIANA* (Wiegmann).

Two adults from Chospiyoc, 10,000 feet altitude, on the Huarcondo River, April 20, 1915; five other specimens (U.S.N.M. Nos. 60722-4 and 60697-8) from the same region, at about 11,000 feet elevation; another adult (U.S.N.M. No. 60721) from Cedrobamba ruins, at timber line, 12,000 feet altitude, June 15, 1915; and another (U.S.N.M. No. 60743) from Ollantaytambo, 9,400 feet, July 14, 1915; all collected by E. Heller. Three adults (U.S.N.M. Nos. 60681-3) from Pucyura, 9,500 feet collected by E. C. Erdis, June 15, 1915.

This large series shows conclusively that *Leimadophis andicolus* Barbour¹ is identical with *Tachymenis peruviana*. In some of the specimens before us, such as the type of *L. andicolus*, the grooves in the enlarged posterior teeth are very far from distinct. A similar condition occurs in *Coniophanes imperialis* and *Erythrolamprus aesculapii*. This suggests that the presence or absence of grooves in the posterior teeth where the dentition is otherwise the same has been greatly exaggerated as a taxonomic character, and we believe that under the present system of classification many closely related genera of snakes are often widely separated into different series by a character of very trivial importance.

28. *ERYTHROLAMPRUS AESCULAPII TETRAZONA* (Jan).

One adult (U.S.N.M. No. 60728) from Yuveni, Rio Cosireni, August, 1915.

29. *DREPANODON ERDISII* Barbour.

One specimen (U.S.N.M. No. 60702), a topotype from Machu Picchu, Urubamba Valley, at the San Miguel Bridge, July 2, 1915.

30. *DREPANODON EATONI* Ruthven.

Another adult specimen (U.S.N.M. No. 60703), with data exactly the same as its foregoing congener.

¹ Proc. Biol. Soc. Washington, vol. 28, 1915, p. 140.

31. *DREPANODON ATTENUATUS*, new species.

Diagnostic characters.—Scales smooth, in 19 rows; no apical pits; ventrals 229, rounded; subcaudals in 105 pairs; loreal smaller than the preocular, but nearly as large as the posterior nasal.

Range.—Cosireni River Valley, Peru.

Type-specimen.—Cat. No. 60739, U.S.N.M.; from the alimentary tract of a specimen of *Erythrolamprus aesculapii*, taken near Rio Cosireni, Peru, August, 1915; E. Heller, collector.

Description of type specimen.—About 10 small maxillary teeth, subequal (the jaws were somewhat smashed), followed after a short interspace by two somewhat enlarged and distinctly grooved teeth; head scarcely distinct from the neck; eye moderate with vertically elliptical pupil; body slightly compressed; scales smooth, in 19 rows; no apical pits; ventrals 229, rounded; anal undivided; subcaudals in 105 pairs; rostral broader than high, just visible from above; nostril in the suture between two nasals; frontal longer than broad; loreal smaller than the preocular, but nearly as large as the posterior nasal; loreal elongate, forming a rectangle; one preocular and two postoculars; temporals 2-4-3; seven and eight upper labials, of which the third and fourth on one side, and the third, fourth, and fifth on the other enter the eye; four lower labials in contact with the anterior chin-shields, which are about equal in length to the posterior pair. Color (in alcohol) of the head, above and on the sides, black, each scale edged with white, and pinkish below; ground color of the body pinkish; 64 black annuli encircling the body, of very irregular outline, the scales forming the edges being generally entirely black; scattered black spots present on the tips of some of the scales of the pink interspace; these light rings generally wider below than above; more black on the sides of the body than above; 16 of the black bands encircling the tail, tip black.

Remarks.—This species is represented by a single specimen. The occurrence of still another species of *Drepanodon*¹ in the Urubamba Region would lead us to suppose that these night-prowling snakes are much more numerous than generally recorded.

32. *MICRURUS HETEROZONUS* (Peters).

A single specimen (U.S.N.M. No. 60701) of this rare species² from Cosireni, 4,000 feet altitude, September 10, 1915; Heller collector.

¹ Barbour, Proc. Acad. Nat. Sci. Philadelphia, 1913, pp. 505-507, pl. 17.

² For use of *Micrurus* instead of *Elaps* see Stejneger and Barbour, Check List N. Amer. Amph. Rept., 1917, p. 106.

33. SIBYNOMORPHUS CATESBEJI (Senzen).

A single specimen (U.S.N.M. No. 60734) of this wide-ranging species from the Comerciato River, 1,800 feet, near the great bend of the Urubamba.

34. SIBYNOMORPHUS PERUANUS (Boettger).

One specimen (U.S.N.M. No. 60718) from Pucyura, 9,500 feet, June, 1915; E. C. Erdis.

35. BOTHROPS PICTUS (Tschudi).

Two specimens (U.S.N.M. Nos. 60714-5), from the Cosireni River.

This form is probably a local race of *B. lanceolatus*, and as such should have a trinomial designation. Future work will probably show that it replaces *B. lanceolatus* in portions of central and southern Peru, its distribution being perhaps correlated with altitudes, although the Museum of Comparative Zoology has a specimen from Lima, which is practically at sea level. It is, however, on the Pacific coast, and *B. lanceolatus* may be confined, except in Ecuador, to the montaña region.